BELLSOUTH

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June 20, 1996

ExParte

Mr. William F. Caton
Acting Secretary
1919 M Street, NW, Room 222
Washington, D.C. 20554

Re: ExParte CC Docket No. 96-45, Federal-State Joint Board on Universal Service

Dear Mr. Caton:

Today, P. Martin and the undersigned of BellSouth and W. Taylor ,Vice President, NERA, met with J. Reel, T. Burmeister, P. Szymczak, A. Belinfante, R. Loube and G. Rosston of the Common Carrier Bureau to discuss BellSouth's position regarding the above-referenced proceeding. The attached documents represent the basis for the presentation and discussion and are consistent with BellSouth's filings in this proceeding .

In accordance with Section 1.1206(a)(1) of the Commission's rules, two (2) copies of this notice are being filed with the Secretary of the FCC today

Sincerely,

Maurice P. Talbot, Jr.
Executive Director - Federal Regulatory

Attachments

CC: J. Reel (w/o attachments)
T. Burmeister (w/o attachments)
P. Szymczak (w/o attachments)
A. Belinfante (w/o attachments)
R. Loube (w/o attachments)
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ECONOMIC PRINCIPLES OF UNIVERSAL SERVICE FUNDING

A. Overview

B. Embedded costs should be used to size a universal service fund.

1. Sizing the fund.

2. Forward-looking incremental costs answer the wrong question.

3. An Example

C. Proxy cost models answer the wrong question incorrectly.

1. Theory

2. Practice

June 20, 1996

ECONOMIC PRINCIPLES OF UNIVERSAL SERVICE FUNDING

A. Overview

There are three sources to provide the required opportunity to recover embedded costs in a competitively neutral manner that will distort competitive process the least:

1. rate rebalancing, moving prices to economically efficient levels. First choice from the perspective of economic efficiency: optimal to pay for fixed costs through fixed, volume-independent charges and to pay for variable costs through volume-sensitive or usage-sensitive charges. Increase in subscriber line charges (SLC) would reduce the amount of sunk or shared/common fixed costs that would remain to be recovered through usage-sensitive charges

2. interconnection pricing, pricing inelastically-demanded services (carrier access, resold local services and unbundled network elements) above cost and reflecting the contribution (price less incremental cost) in the imputation price floor for the LEC's retail services. If the interconnection service demand is perfectly inelastic, recovery from interconnection pricing has similar efficiency characteristics as recovery through a universal service fund.

3. universal service fund: recovering required contribution from all users of the public switched network — including the LEC itself -- on a competitively neutral basis.

B. Embedded costs should be used to size a universal service fund.

While appropriate as key input for *pricing* new services or increments to existing services, forward-looking incremental costs are not appropriate for recovery of universal service support.

1. Sizing the fund.

◊ Universal service support has three components: (i) difference between *embedded* costs and rates, (ii) amortization of current depreciation reserve deficiencies, and (iii) cost of Lifeline and LinkUp programs

◊ Embedded costs should be the standard because actual costs of universal service are the result of past commitments made under regulatory bargain assuring an opportunity to recover. LECs should be able to recover actual costs of those commitments.

◊ This includes slower than economic depreciation of assets placed to provide universal service.

◊ Even if *initial* level of universal service support is set as the difference between the incumbent LEC's embedded cost per line and the basic rate, competition and portability of the support (excluding the amortized reserve deficiency portion) will ensure that eventually customers receive service from only the lowest-cost providers.

[Embedded costs should be used to size a universal service fund]

2. Forward-looking incremental costs answer the wrong question.

◊ Incremental costs are forward-looking costs which, by definition, disregard costs imposed by historical special obligations. Therefore, basing support solely on the difference between incremental costs and rates will prevent LEC from recovering the embedded costs of past special obligations (which the regulatory bargain promised an *opportunity* to recover).

◊ Pricing all services *at* incremental costs would prevent the LEC from also recovering its substantial shared and common fixed costs. Without a contribution to these costs, LEC cannot remain viable.

◊ Recovering all shared and common fixed costs from retail services results in inefficient competition.

[Embedded costs should be used to size a universal service fund]

3. An Example

◊ Suppose a LEC provides two services *A* and *B*. Its incremental costs for the two services are 3¢ and 4¢ per minute respectively. The LEC also has shared and fixed common costs of $10,000.

◊ It expects to provide 200,000 and 100,000 minutes respectively for A and B. At these levels of demand, the LEC's combined incremental costs would be $10,000. However, its total costs would be $10,000+$10,000 = $20,000.

◊ By pricing A and B exactly at their respective incremental costs, the LEC would only recover $10,000 of these costs. To recover total costs, the LEC would have to add contributions to the service prices that would recover the $10,000 in shared and common costs. One possibility is for the two prices to be set at 6¢ and 8¢, respectively. These prices — while above incremental costs — would ensure recovery of all costs. While other combinations of prices marked up above incremental costs are possible, any set of prices that fails to deliver $20,000 in revenue at the given levels of demand will mean that the LEC will not recover all its costs.

◊ Next, suppose that historically service A has been priced at 1¢ a minute to satisfy a public policy goal. Assuming that the demand for A is totally unresponsive to price and that 200,000 minutes of demand should be expected, the LEC would only earn a total revenue of $10,000 (even with a price of 8¢ per minute for B), i.e., it would incur a revenue deficit of $10,000. To make up this deficit, B would be forced to price B at 18¢ a minute (again assuming no price-responsiveness for B). Thus, the same $20,000 in costs would be recovered by a (1¢,18¢) price configuration instead of a (6¢,8¢) configuration. Clearly requiring that B be priced at incremental cost (i.e., 4¢) when A is priced at 1¢ will fail to recover all costs by a wide margin.

◊ Finally, suppose that in the near future technological improvements reduce the incremental cost of A to 2¢ a minute, but that for B remains unchanged. Regardless of the change, the fact is that the fixed costs to provide the services have already been committed. So even if A's incremental cost moves down in the future, some of the costs associated with it when it was first deployed have already been incurred and are not reversible. Therefore, asking the LEC to price A exactly at its new incremental cost of 2¢ will again force it to experience a revenue shortfall.

C. Proxy cost models answer the wrong question incorrectly.

Proxy cost models like the Benchmark Cost Model (BCM) and the Hatfield model (Hatfield) only produce benchmark (incremental) costs assuming best practices but not actual or embedded costs. In addition, the Hatfield model does not model the cost of any realistic local service provider and particular inputs and processes appear to understate systematically the forward-looking incremental costs of supplying local telephone service. BCM and Hatfield were designed to identify geographic areas that are *relatively* high or low cost to serve, but does not provide *absolute* levels of cost for any area. They cannot help to determine the *absolute* size of the universal service fund.

1. Theory

◊ Scorched node calculation differs from costs incurred by real-world firms that add capacity in increments as demand expands. No firm in competitive market can price at scorched node incremental cost.

◊ Inconsistent view of the best of monopoly and competitive supply: (i) assumes economies of scale from deploying larger modules and high capacity utilization from efficient inventory management, (ii) assumes competition forces reductions in costs requiring the latest technology, (iii) assumes equipment depreciates at regulatorily-prescribed rates, cost-of-capital is the same as for regulated utilities and LEC is guaranteed the full monopoly level of demand.

[Proxy cost models answer the wrong question incorrectly]

2. Practice

◊ BCM/Hatfield would not even produce forward-looking costs of a particular LEC (incumbent or entrant) in a particular state because they use nationwide average values for critical cost inputs.

◊ BCM/Hatfield focus only on the *investment* portion of local telephone service, accounting for operating expenses only through assumed annual cost factors. Discounts in cable purchases, for example, imply lower maintenance costs.

◊ BCM/Hatfield often fail to represent accurately the locations of existing or planned facilities or to assign the census block groups (CBGs) to correct wire centers.

◊ Simplified distribution model understates real-world costs. More than four distribution cables. Cannot use digital loop carrier systems ubiquitously.

◊ Understates costs of geography, non-uniform distribution of subscribers, lakes, mountains, rivers, hurricanes, termites, etc.

[Proxy cost models answer the wrong question incorrectly]

[Practice]

◊ BCM/Hatfield uses questionable or non-representative assumptions about best engineering practices (e.g., about loop lengths, switch types for rural and urban areas, feeder lengths at which fiber is placed, etc.)

◊ BCM/Hatfield uses unrealistic fill factors. Competition does not push fill from current actual to objective because of demand uncertainty. In long distance, four major networks have easily 30 percent excess capacity.

◊ Switching costs unrealistic because they ignore higher costs of adding additional line capacity to an existing switch.

◊ BCM/Hatfield calculation ignores the fact that investment is irreversible, sunk and subject to ordinary uncertainty from technological change and interest rate variability as well as extraordinary demand and price uncertainty from the Act which mandates that ILECs provide facilities to entrants who are not obliged to take them:

  ◊ assumed cost of capital unrealistically low.

  ◊ depreciation rates unrealistically low - use economic depreciation.

Result is that no LEC would enter voluntarily with its obligations if services were priced at BCM incremental cost.

PRICEOUT OF BELLSOUTH'S UNIVERSAL SERVICE FUND PROPOSAL

This exhibit calculates the amount of implicit support provided to universal service and carrier of last resort obligations that is built into BellSouth's rate structure. Based on the general methodology used to calculate BellSouth's universal service support, an estimate is then made of the nationwide amount of federal universal service support that currently exists.

The methodology to calculate the total implicit support for BellSouth is as follows:

Step 1: Determine the amount of BellSouth's interstate common line costs associated with switched services. ARMIS reports provide this information. They are publicly available and developed pursuant to methodology established by the FCC. Page 5 of this exhibit provides the steps necessary to convert the ARMIS investment data into an annual revenue requirement.

Step 2: Multiply the interstate common line revenue requirement by 4 to arrive at total unseparated common line cost (since the federal jurisdiction is assigned 25% of common line cost). Thus Item A on Page 6 equals four times the amount shown on Line 13 of Page 5.

Calculate the past COLR component:

Step 3: Determine the amount of unrecovered investment associated with the common line for which recovery is not a certainty due to the change to a more competitive environment. This investment can be calculated as the difference between the current book depreciation reserve levels and the depreciation reserve levels required in a competitive environment (i.e.- the theoretical reserve deficiency). Divide this amount of investment by the number of years (eight years) it would take to recover the investment given the prescribed lives. This is the annual amount to be recovered. This result is shown on Page 6, Item B. It should be noted that this item does not represent 'new' or accelerated depreciation recovery nor a change in depreciation rates. It simply identifies an amount of investment that is currently being recovered, and ensures that recovery, even with local exchange competition.

Step 4: To calculate Item C on Page 6, perform the same calculations as in Step 3 above for those investments not considered in Step 3. These investments are not associated with the common line but should be considered in the recovery of universal service/COLR obligations.

Step 5: In Item D, Page 6, sum together Items B and C. This provides the total annual amount of recovery for investment placed in the past to meet current COLR obligations for which recovery is not a certainty due to the changes occurring in the competitive/regulatory environment.

Social pricing component:

Step 6: Item E, Page 6, is calculated as Item A minus Item B. It represents the total common line costs which remain after backing out the annual common line cost which will be recovered via the past COLR recovery element.

Step 7: Item F, Page 6, is calculated as follows: Determine the percentage of the adjusted common line costs that are associated with the services included in the definition of universal services. This percentage is calculated by taking the total number of residential access first lines* and dividing by the total number of switched access lines.

Step 8: Item G, Page 6, is calculated as Item E times Item F. It represents a conservative estimate of the ongoing cost of the carrier of last resort/universal service obligation. It is conservative because it only includes common line loop costs. No switching or interoffice transport costs were included in this calculation due to the complexities involved in estimating the switching and interoffice transport costs associated with basic local exchange service.

Step 9: Item H, Page 6, determines the tariffed revenues received from services included as part of universal service. (Included are revenues from the following sources: flat and measured rate residential* basic rates, associated service charges and Touchtone charges.)

Step 10: Item I, Page 6, determines the ongoing social pricing support provided to universal service and carrier of last resort obligations and is calculated by subtracting Item H from Item G. The sum of Items D and I, Page 6, represents the universal service support for BellSouth. These numbers are also shown on Page 7, Items A, B and C.

* BellSouth's calculations include single line business lines in Georgia and Florida, since it is part of the universal service definition in those states. This inclusion has minimal impact on the size of the fund since single line business is generally priced above its cost.

Calculations Required to Split the Support Between the Interstate and Intrastate Jurisdictions

The following steps are required to split the universal service support between jurisdictions.

Step 11: Determine the amount of universal service support that is currently being dealt with in the Interstate jurisdiction. For large LECs, this equals the amount of the Interstate Carrier Common Line (CCL), the Interstate Residual Interconnection Charge (RIC) and the old Universal Service Fund (USF). The sum of these revenue amounts is shown on Line F of Page 7. This represents the support that is provided to universal service in the interstate jurisdiction.

Step 12: Split the interstate universal service support into its two components: 1) the annual recovery of the reserve deficiency (Past COLR), and 2) the amount of support to cover ongoing universal service obligations (Social Pricing Support). The Past COLR component equals the annual recovery of the Interstate portion of the reserve deficiency. This amount is shown on page 7, Item D. The Interstate component of Social Pricing Support is then calculated as the difference between the existing Interstate support (Item F) and the Interstate component of Past COLR Support (Item D). This amount is shown as Item E on page 7.

Step 13: The overall amount of Intrastate support is then calculated as the difference between the overall amount of universal service support (Page 7, Item C) and the total Interstate support (Page 7, Item F). This amount is shown as Item I on Page 7.

Step 14: The Intrastate support is apportioned between the intrastate component of Past COLR support (based on state PSC prescribed depreciation lives), and the intrastate component of social pricing support in the same manner as was done for the Interstate support. The intrastate components are shown as Items G and H on Page 7.

Step 15: Make Interstate price reductions equal to the amount of Interstate support that is received. This amount is shown as Item K on Page 7. In this proposal, the Interstate CCL, Interstate RIC and old USF would be reduced to zero. These reductions are detailed on Page 9. Of course, to the extent that BellSouth is required to contribute to universal service support, it would need the flexibility to recover those contributions in its rates.

Make Interstate Support for Universal Service Explicit

Step 16: The existing support for universal service will be replaced by a new universal service fund. All interstate support for universal service, with the exception of the Past COLR support (Page 7, Item D), will be calculated on a per line basis based on cost characteristics of wire center groupings. The wire centers could be grouped based on density characteristics (number of access lines per square mile), as is shown in Columns A and B on Page 8. BellSouth has studied its embedded costs by wire center and that cost relationship was used to calculate interstate cost per line by wire center grouping (Column D of Page 8). Interstate support from the Federal universal service fund would then be provided for the difference between the Interstate Cost per line (Column D) and the Interstate SLC (Column E). The Federal universal support per line is shown in Column F of Page 8. This amount of support would be made available on a per line served basis to any eligible carrier (from Page 8, line 1). Note: To the extent that subscriber line charges are increased, that would decrease the amount of support required from a new universal service fund.

Summation for BellSouth:

Page 9 provides a summary view of the changes that would occur for BellSouth's revenue flows. As can be seen, the interstate CCL and RIC and the old USF would go to zero. Interstate support, estimated at $1036 million for BellSouth, would be received from the new federal universal service fund.

Nationwide Priceout:

Page 10 provides an estimate of the nationwide federal universal service support that currently exists. This amount would be converted into a new federal universal service fund. However, if subscriber line charges are allowed to increase in the manner proposed by USTA, then the federal universal service fund would be smaller in size. The total federal support is estimated at $7.7 billion. Of this amount, BellSouth estimates that some $2.8 billion could be covered through subscriber line charge increases (if a $6.00 maximum SLC were adopted, as has been proposed by USTA), with the remainder of the support ($4.9 billion) being provided from the new universal service fund. All of this new fund amount (with the exception of the Past COLR support) would be made available on a per line served basis to any eligible carrier.

Revenue Requirement Input Sheet

BELL SOUTH

Account		INPUT ($ 000)
Interstate ROR(NECA)		0.1125
Armis Ln.	1090M	$1,722,714
Armis Ln.	1190K	$1,172,295
Armis Ln.	1490M	$95,899
Armis Ln.	1510K	$82,414
Armis Ln.	1520K	$3,806
Armis Ln.	1530K	$1,306
Armis Ln.	1540K	$9,582
Armis Ln.	1690K	$6,113,279
Armis Ln.	1690M	$6,266,002
Armis Ln.	1910K	$2,919,290

STATE: **BELL SOUTH** ($ 000)

Revenue Requirement Calculation Sheet

1. Interstate Rate of Return (Authorized ROR as currently used for the NECA High Cost Fund)		0.1125
2. Average Net Investment (LN 1910K)		$2,919,290
3. Return (L1xL2)		$328,420
4. Investment Tax Credit Amortized (LN1540K)		$9,582
5. Fixed Charge (LN 1510K)		$82,414
6. IRS Income Adjs (1520K)		$3,806
7. FIT "Taxable Income" (L3-L4-L5+L6)		$240,230
8. FIT Gross UP Factor	Tax Rate i.e. .35 1- Tax Rate 1-.35	0.538462
9. Gross FIT (L7xL8)		$129,355
10. Net FIT (L9-L4)		$119,773
11. Total State and Local Tax	loc & st taxes* (2001BFP/2001CL) Ln 1490M * (Ln1690K / Ln1690M)	$93,562
12. Total Operating Expense (LN 1190K)		$1,172,295
13. Interstate Revenue Requirements (L3+L10+L11+L12)		$1,714,050
14. Conversion Factor (4)		4
15. Unseparated Total Revenue Requirements (L13 x L14)		$6,856,200

Note: Sourcing is to the Annual Armis FCC Report 43-01

CALCULATION
UNIVERSAL SERVICE
SUPPORT REQUIREMENTS
BELLSOUTH REGION

A. COMMON LINE (CL) COSTS: $6,856M

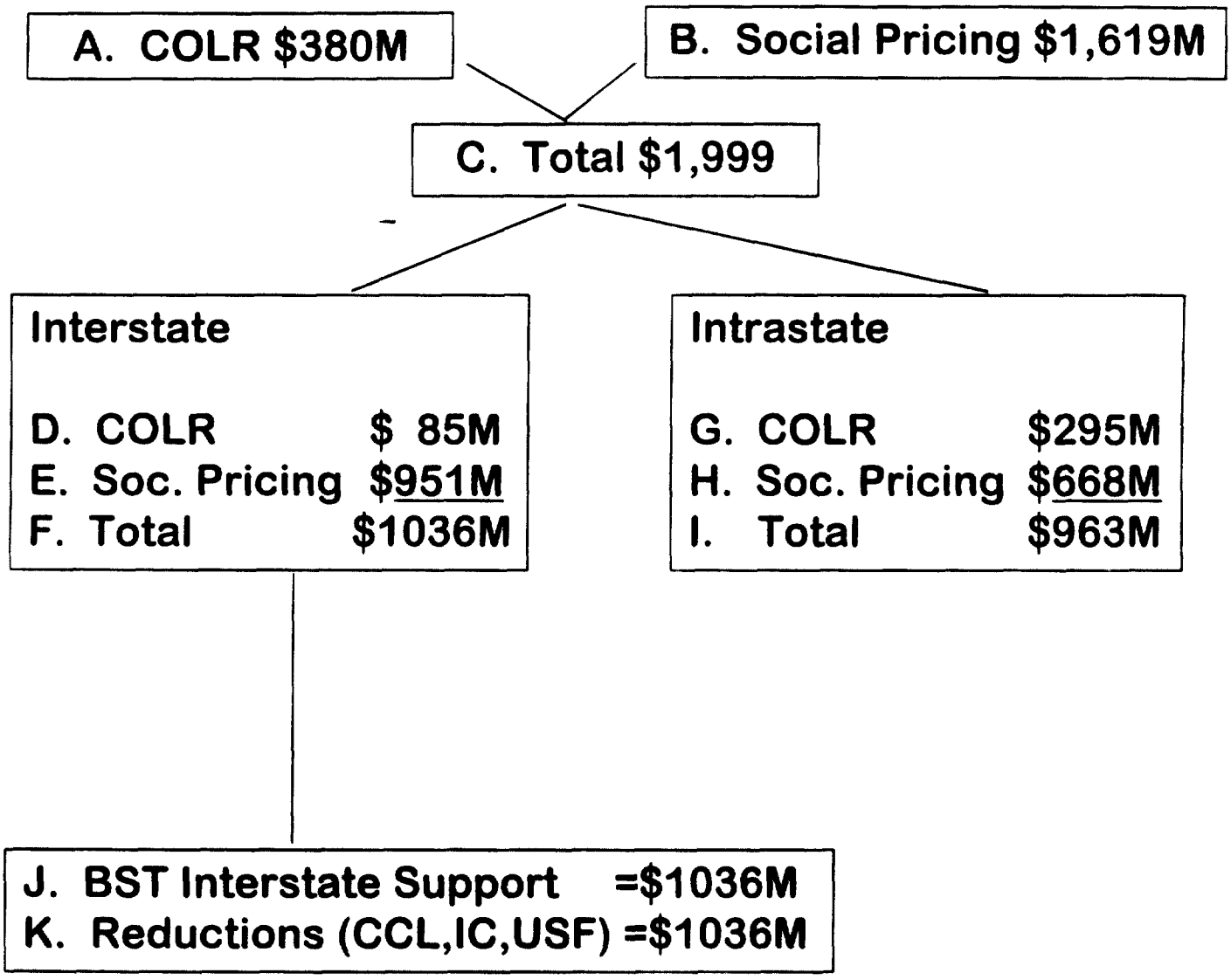
PAST COLR

B. Past Invst-CL Cost Recovery:	**$ 232M**
C. Past Invst-Non-CL Cost Recovery	**$ 148M**
D. COLR Fund -BST	**$ 380M**

SOCIAL PRICING

E. Remaining CL Cost:	**$ 6,624M**
F. % of Lines: Univ. Svc	**66.9%**
G. CL Cost-Univ. Svc.	**$ 4,434M**
H. Univ. Svc. Revenues	**$ 2,815M**
I. Social Pricing Fund-BST	**$ 1,619M**

SPLIT OF UNIVERSAL SERVICE SUPPORT REQUIREMENTS BELLSOUTH REGION



FEDERAL UNIVERSAL SERVICE SUPPORT BY WIRE CENTER GROUPING

BELLSOUTH REGION

(A)	(B)	(C)	(D)	(E)	(F)
WIRE CENTER COST GROUP	**TOTAL ACCESS LINES PER SQUARE MILE**	**NUMBER OF RESIDENCE LINES**	**INTERSTATE RECOVERY PER LINE**	**INTERSTATE SLC**	**INTERSTATE SUPPORT PER LINE**
1	**0.1 - 10**	**157,872**	**$19.52**	**$3.50**	**$16.02**
2	**10.1 - 20**	**604,970**	**$14.89**	**$3.50**	**$11.39**
3	**20.1 - 50**	**1,527,729**	**$12.13**	**$3.50**	**$8.63**
4	**50.1 - 500**	**5,206,184**	**$10.00**	**$3.50**	**$6.50**
5	**500.1 - 1000**	**1,817,720**	**$8.54**	**$3.50**	**$5.04**
6	**1000.1 - 3000**	**3,238,372**	**$6.89**	**$3.50**	**$3.39**
7	**3000.1 - 5000**	**950,669**	**$5.67**	**$3.50**	**$2.17**
8	**> 5000**	**455,738**	**$4.90**	**$3.50**	**$1.40**

BELLSOUTH INTERSTATE UNIVERSAL SERVICE FUNDING PROPOSAL
BELLSOUTH REGION

	CURRENT ($M)	PROPOSED (NOTE) ($M)	DIFFERENCE ($M)
A. INTERSTATE CCL	$712	$0	($712)
B. INTERSTATE RIC	$282	$0	($282)
C. INTERSTATE USF	$42	$0	($42)
D. INTERSTATE RESIDENTIAL SLC	$586	$586	$0
E. NEW UNIVERSAL SERVICE FUND	$0	$1,036	$1,036
F. TOTAL	$1,622	$1,622	$0

NOTE: DOES NOT REFLECT ANY SLC INCREASE

ESTIMATE OF NATIONWIDE FEDERAL UNIVERSAL SERVICE SUPPORT BASED ON BELLSOUTH'S FUNDING PROPOSAL

Estimated Total Universal Service Costs (Core Services)	$31.1 B
Estimated Total Universal Service Revenues	$17.9 B
Estimated Total Universal Service Support	$13.2 B
Estimated Intrastate Support for Universal Service	$5.5 B
Total Estimated Federal Support for Universal Service:	**$7.7 B**

Note: This would be the size of the new Federal universal service fund for core services in the absence of any subscriber line charge (SLC) increases.

Nationwide Size of Federal Universal Service Fund Reflecting SLC Increases Up to a Maximum of $6.00 as Proposed by USTA:

Cumulative SLC Increases (Estimated)	$2.8 B
New Federal Universal Service Fund	$4.9 B
Total	$7.7 B

Note: The Federal Universal Support Amount is calculated based on the total of existing Interstate Support mechanisms (the Interstate CCL, the Interstate RIC, the existing Universal Service Fund, DEM Weighting, and Long Term Support)

BellSouth's Proposal for a Federal Universal Service Fund

BellSouth Telecommunications, Inc.

Need to Make Implicit Support Explicit

- Telecommunications Act of 1996 requires that universal service support be explicit, sufficient, and sustainable
- Most support today is implicit, and will not be sustainable in a competitive environment
- Need to replace current federal universal service support mechanisms with explicit, sufficient and sustainable mechanism
- Telecommunications Act requires both state and federal mechanisms

Key Requirements of any New Funding Mechanism

- Should not shift burden for funding universal service between jurisdictions
- Should generally be revenue neutral upon implementation
- Purpose should be to replace current implicit support with explicit support

Universal Service Funding

- Three major components of Interstate fund
  - » Core Fund
    - – Social Pricing Fund
    - – Underdepreciated Plant (COLR)
  - » Education and Health Care
  - » Low Income

Core Universal Services

- **Definition includes residential voice grade basic local exchange telephone service**
  - **» Single Party Service with Directory Listing**
  - **» Touch Tone**
  - **» Access to Emergency Services**
  - **» Access to Operator Services**
  - **» Access to Directory Services**
- **Total Support calculated on an unseparated basis**
- **Distinct split made between Interstate and Intrastate components**
- **Interstate support initially set equal to implicit Interstate CCL and RIC, DEM Weighting, Long-Term Support and explicit support from current USF Fund**

Core Universal Services

- Replace current implicit support with SLC rebalancing and universal service fund
  - » One possibility would be to transition to maximum $6.00 SLC over four year period, as proposed by USTA
  - » Deaverage SLC and universal service support into wire center groupings where support per line varies based on cost characteristics